

Abstract

A glass for use in chemical reinforcement for use in a substrate of an information recording medium, having a composition comprising, denoted as mol%:

SiO₂ 47 to 70 %

Al₂O₃ 1 to 10 %

(where the total of SiO₂ and Al₂O₃ is 57 to 80 %)

CaO 2 to 25 %

BaO 1 to 15 %

Na₂O 1 to 10 %

K₂O 0 to 15 %

(where the total of Na₂O and K₂O is 3 to 16 %)

ZrO₂ 1 to 12 %

MgO 0 to 10 %

SrO 0 to 15 %

(where the ratio of the content of CaO to the total of MgO, CaO, SrO, and BaO is greater than or equal to 0.5)

ZnO 0 to 10 %

(where the total of MgO, CaO, SrO, BaO, and ZnO is 3 to 30 %)

TiO₂ 0 to 10 %

and the total content of the above-stated components is greater than or equal to 95 %.

A glass for use in chemical reinforcement for use in the substrate of an information recording medium employed in a perpendicular magnetic recording system, in which the glass exhibits the glass transition temperature is greater than or equal to 600°C. A substrate for use in an information recording medium consisting of the above glass and being chemically reinforced. A substrate for an information recording medium consisting of a chemically reinforced glass having a glass transition temperature of greater than or equal to 600°C and exhibiting a bending strength following heating for two hours at 570°C of greater than or equal to 15 kgf/mm². An information recording medium comprising an information recording layer on the above substrate for an information

recording medium. The present invention provides glass having both high thermal resistance and high strength, a substrate for use in information recording media comprised of this glass, and an information recording medium employing such a substrate.